

INVESTIGATOR'S ANNUAL REPORT

National Park Service

All or some of the information provided may be available to the public

Reporting Year: 2003	Park: Shenandoah NP												
Principal Investigator: Dr Ben Morgan	Office Phone: (703)648-6927 Email: bmorgan@usgs.gov												
Address: MS926A National Center USGS Reston, VA 20142 US	Office Fax: (703)648-6953												
Additional investigators or key field assistants (first name, last name, office phone, office email): <table border="0"> <tr> <td>Name: Ron Litwin</td> <td>Phone: n/a</td> <td>Email: rlitwin@usgs.gov</td> </tr> <tr> <td>Name: Scott Eaton</td> <td>Phone: n/a</td> <td>Email: eatonls@jmu.edu</td> </tr> <tr> <td>Name: Joe Smoot</td> <td>Phone: n/a</td> <td>Email: jpsmoot@usgs.gov</td> </tr> <tr> <td>Name: Gerred Wieeorer</td> <td>Phone: n/a</td> <td>Email: gwieeotor@usgs.gov</td> </tr> </table>		Name: Ron Litwin	Phone: n/a	Email: rlitwin@usgs.gov	Name: Scott Eaton	Phone: n/a	Email: eatonls@jmu.edu	Name: Joe Smoot	Phone: n/a	Email: jpsmoot@usgs.gov	Name: Gerred Wieeorer	Phone: n/a	Email: gwieeotor@usgs.gov
Name: Ron Litwin	Phone: n/a	Email: rlitwin@usgs.gov											
Name: Scott Eaton	Phone: n/a	Email: eatonls@jmu.edu											
Name: Joe Smoot	Phone: n/a	Email: jpsmoot@usgs.gov											
Name: Gerred Wieeorer	Phone: n/a	Email: gwieeotor@usgs.gov											
Permit#: SHEN-2002-SCI-0004													
Park-assigned Study Id. #: SHEN-00190													
Project Title: Study of Geologic Resources and Surficial Mapping													
Permit Start Date: Jan 01, 2002	Permit Expiration Date Dec 31, 2004												
Study Start Date: Jan 01, 2002	Study End Date Dec 31, 2004												
Study Status: Continuing													
Activity Type: Research													
Subject/Discipline: Geology / General													
Objectives: Study of surficial geology in and adjacent to Shenandoah National Park relating those studies to problems of slope stability and landscape evolution and developing an understanding of the Pleistocene/Holocene climate and landscape history of the Park.													
Findings and Status: Continued analysis of sites for pollen assemblage and containing enough carbon for C-14 dating to refine models for climate change in the Blue Ridge between about 35,000 years before presnet through to the historic period. Field work continued in the Kinsey Run area to complete detailed sedimentological description of the slope wash deposits that have been dated at 26,000 to 14,000 ypb.													
For this study, were one or more specimens collected and removed from the park but not destroyed during analyses? Yes													
Funding provided this reporting year by NPS: 0	Funding provided this reporting year by other sources: 250000												
Fill out the following ONLY IF the National Park Service supported this project in this reporting year by providing money to a university or college													
Full name of college or university:	Annual funding provided by NPS to university or college this reporting year:												

n/a	0
-----	---